

13dBm Band Selective SMR-LTE 850MHz Micro Repeater (BDA) Model No: MR-85S-13W65-S



Features:

- **Bi Directional Amplifier (BDA) configuration**
- **To expand signal coverage or fill signal blind area where signal is weak or unavailable, with 13dBm composite power & 65dB gain**
- **Perfect solution for installation at Hotels, Exhibition centers, Basements, Shopping Malls, Offices, Parking lots, Houses etc.**
- **Support LTE, iDEN, APC025, TETRA at the SMR 850 MHz band**
- **Isolation detection**
- **Low power consumption with 2W to 3W, with sleeping mode (saving power)**
- **Linear power amplification to effectively suppress inter-modulation and spurious emission**
- **Smart Automatic Level Control (ALC) ensures output level stable and adjustable continuously**
- **Intelligent protection Unique color LEDs to indicate power supply, Isolations, AGC & alarms**
- **Simple installation with external AC/DC adapter**

Introduction

The EMTS Telecom Services 13dBm SMR 850 MHz Band Selective Micro Repeater provides an affordable solution to solve the indoor signal coverage problems in SMR system due to signal fading and attenuation caused by architecture obstacles. Its easy installation and maintenance allow the operator to get a fast return on its investment.

The repeater is working as a relay between the BTS and mobiles. It picks up the strongest signal from BTS via the Donor Antenna, linearly amplifies the signal and then retransmits it via the Indoor DAS to the weak/blind coverage area. The mobile signal is also amplified and retransmitted to the BTS via the opposite direction. The band-selective function can choose to amplify the signal within the customized band. The repeater having an advance LED indications which supports the installation process.



EMTS Telecom Services Ltd. offers a comprehensive portfolio of enhanced coverage solutions for the Wireless Networks, Based on advanced technologies. **EMTS** proven, indoor and outdoor solutions solve a wide range of network challenges including interference and oscillation problems, challenging coverage holes, rapid response deployment and inadequate in-building coverage. Regardless of the technology or frequency, **EMTS** can provide customized coverage solutions that address any combination of unique and complex network needs for the Wireless Networks.

Technical Specifications:

Items		Uplink	Downlink
Frequency range		806-824 MHz Full or partial bandwidth	851- 869 MHz Full or partial bandwidth
Gain		65dB±3dB	65dB±3dB
In band ripple		± 2 dB	
Auto Gain Control(AGC)		≥ 25dB	
Maximum input power(non-destructive)		0dBm(CW Signal)	
Output power		13 dBm±1dB	13 dBm ± 1dB
Out of Band Gain	$2.7 \leq f_{\text{offset}} < 3.5\text{MHz}$	<60dB	
	$3.5 \leq f_{\text{offset}} < 7.5\text{MHz}$	<45dB	
	$7.5 \leq f_{\text{offset}} < 12.5\text{MHz}$	<45dB	
	$12.5 \leq f_{\text{offset}}$	<35dB	
Spectrum Emission Mask	$2.515 \leq f_{\text{offset}} < 2.715\text{MHz}$	≤ -22dBm/30KHz	
	$2.715 \leq f_{\text{offset}} < 3.515\text{MHz}$	≤ -22dBm-15×(f offset/MHz-2.715)dB/30KHz	
	$3.515 \leq f_{\text{offset}} < 4.0\text{MHz}$	≤ -34dBm/30KHz	
	$4.0 \leq f_{\text{offset}} < 8\text{MHz}$	≤ -21dBm//1MHz	
	$8\text{MHz} \leq f_{\text{offset}} < f_{\text{offsetmax}}$	≤ -25dBm/1MHz	
Spurious Emission & Third-order IMD		Comply with 3GPP TS 25.106 V6.0.0	
ACRR		20dBc/30KHz@±5MHz 20dBc/30KHz@±10MHz	
Frequency Stability		≤ ±0.01ppm	
Peak Code Domain Error		≤ -35dB@Spreading Factor 256	
Noise figure		6dB @max Gain	
VSWR		>2:1	
Delay		<5μs	
Power supply / consumption		DC 9V / 15 W	
Dimensions / Weight		186*122*65mm / ≤ 2Kg	
Output connector		NF female connector (50Ω)	
IP protection rank		IP40	
Working temperature range		-10 to + 50 deg. C	
LED indication	Power LED	DC ON/OFF	
	AGC Alarm	ALC20 - 25dB,red	
	ISO LED (Isolation)	ISO green means that Isolation between donor antenna and service antenna is OK. ISO red means isolation less than required & need to increase the isolation between antennas.	

About EMTS Telecom Services Ltd.:

EMTS Telecom Services is a leading supplier of high-quality RF coverage solutions designed to maximize wireless network coverage in difficult RF environments and complex settings. The company specializes in extending RF radio coverage to rural areas, office buildings, subways, tunnels and shadowed areas. The EMTS coverage solution supports all major mobile technologies and standards of wireless Networks.

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